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Issuance Date:	
Effective Date:	Reserved for Issuance
<b>Expiration Date</b>	): 

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT No.WA0037478

State of Washington DEPARTMENT OF ECOLOGY Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq.

Darigold, Inc. P.O. Box 34377 Seattle, WA 98119

is authorized to discharge in accordance with the Special and General Conditions that follow.

Facility Location:Receiving Water/Collection SystemDarigold, Inc.(wastewater treatment plant):67 Southwest Chehalis AvenueCentralia Reach of Chehalis River/City ofChehalis, WA 98532ChehalisIndustry Type:Discharge Location:

5143Dairy Products, 2023-Condensed and Evaporated Milk, 2033-Canned Fruits, Longitude: 122.9913 W

Vegetables, Preserves, Jams and Jellies

is authorized to discharge in accordance with the special and general conditions which follow.

Garin Schrieve, P.E.
Southwest Region Manager
Water Quality Program
Washington State Department of Ecology



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## SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly and Quarterly	Reserved for issuance Reserved for issuance
S3.E	Reporting Permit Violations	As necessary	
S4.A	Operations and Maintenance Manual	1/permit cycle	January 1, 2014
S4.A	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	
S4.B	Reporting Bypasses	As necessary	
S5.	Application for Permit Renewal	1/permit cycle	January 1, 2014
S6.C	Solid Waste Control Plan	1/permit cycle	January 1, 2014
S6.C	Modification to Solid Waste Plan	As necessary	
S8.	Spill Plan	1/permit cycle, updates submitted as necessary	January 1, 2014
S9.	Outfall Evaluation	1/permit cycle	January 1, 2014
G1.C.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Notice of Permit Transfer	As necessary	
G10.	Duty to Provide Information	As necessary	



#### SPECIAL CONDITIONS

#### S1. DISCHARGE LIMITS

#### A. <u>Process Wastewater Discharges</u>

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, Darigold is authorized to discharge their treated wastewater through Outfall 001 in the Centralia Reach of Chehalis River at the permitted location subject to complying with the following effluent limits.

Table 1 specifies the cumulative effluent limits of the parameters based on the Consent Decree signed by the parties on October 14, 1998. This Consent Decree explains the discharge time and the flow rate in the Centralia Reach of the Chehalis River.

Table 1 - FINAL EFFLUENT LIMITS: OUTFALL # Outfall 001 (Discharge to the Centralia Reach of Chehalis River)						
Parameter Average Monthly <sup>a</sup> Maximum Daily <sup>b</sup>						
Flow, MGD	0.48	0.60				
Biochemical Oxygen Demand (5-day), lbs/day	75	95				
Total Suspended Solids, lbs/day	75	95				
Ammonia , mg/L	3	6				
Temperature, ° C	See Table 2	See Table 2				
Fecal Coliform Bacteria <sup>c</sup>	200	400				
Total Chlorine Residual	N/A	Non-detectable				
pH <sup>d</sup>	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0					

<sup>&</sup>lt;sup>a</sup> Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

<sup>&</sup>lt;sup>b</sup> Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.

<sup>&</sup>lt;sup>e</sup> To calculate the average monthly and average weekly values for fecal coliforms you must use the geometric mean. The Department of Ecology (Ecology) gives directions to calculate this value in publication No. 04-

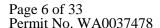




Table 1 - FINAL EFFLUENT LIMITS: OUTFALL # Outfall 001								
	(Discharge to the Centralia Reach of Chehalis River)							
Parameter Average Monthly <sup>a</sup> M				Maxii	mum Daily <sup>b</sup>			
10-020,	Information	Manual	for	Treatment	Plant	Operators	available	at:
http://www.ecy.wa.gov/pubs/0410020.pdf								
d Do not a	verage pH values.	•						

#### B. Mixing Zone Authorization

This permit authorizes the mixing zone for the process/non process water discharge temperature. The mixing zone for this discharge for temperature limits extends from 100 feet upstream of the outfall to 300 feet plus the depth of water over the discharge port downstream of the Darigold's outfall.

#### C. <u>Discharge Timeline and Restriction</u>

For the period May 1 through September 15 of each year, Darigold must cease discharge to the Centralia Reach of Chehalis River on the next day and all subsequent days after the flow of the Centralia Reach is less than 500 cubic feet per second (cfs). When the flow in the Centralia Reach increases above 1,000 cfs for 3 consecutive days, Darigold may continue/resume discharge to the Chehalis River. However, Darigold must again cease discharge to the Centralia Reach on the next day after the flow decreases below 500 cfs.

From September 16 through October 31, Darigold may discharge to the Centralia Reach after 3 consecutive days during which the flow of the Centralia Reach is greater than 500 cfs. Counting of consecutive days may not begin before September 13. Once this discharge is allowed, it may continue for the remainder of this period. From November 1 through April 30, Darigold may discharge to the Centralia Reach regardless of the flow of the Chehalis River.

The Permittee must calculate the flow of the Chehalis River in the Centralia Reach based on the flow at the USGS Grand Mound Stream Gage using the following equation:

$$Y = 0.7396x - 28.28$$

#### Where:

- Y is the flow, in cubic feet per second (cfs), in the Centralia Reach.
- X is the flow of the Chehalis River, in cfs, as measured at the USGS Grand Mound Stream Gage.

During the non-critical period, temperature limits are based on the background water temperature upstream of the mixing zone. Darigold must apply the following approach to determine that they meet the background temperature criteria. The Ecology report titled "Upper Chehalis River Basin Temperature Total Maximum Daily Load" of July 1, 2001, explains the calculation of the temperature Waste Load Allocation (WLA) on page 26.



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**Table 2- Temperature calculations method** 

<b>River Conditions</b>	Background Water Temperature (T) Upstream of the Mixing Zone	Allowable temperature increase
Critical Period	T ≥ Water Quality Criterion	For Existing Sources: $t = 0.3$ °C at the mixing zone boundary For New Sources: $t = 0.0$ °C at the end of the discharge pipe
Non critical Period	IF (Water Quality Criterion – T) $> 28/(T+7)$	THEN For all Sources: t = 28/(T+7)
	IF (Water Quality Criterion – T) $\leq 28/(T+7)$	THEN
	AND	i. For all Sources: $t = 0.3$ °C
	<ul><li>i. (Water Quality Criterion – T) ≤ 0.3°C</li><li>ii. (Water Quality Criterion – T) &gt; 0.3°C</li></ul>	ii. For all Sources: t = (WQ Criterion – T)

"T" represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge, and "t" represents the maximum permissible temperature increase. Unless specified otherwise, "t" applies at the mixing zone boundary.

#### D. <u>Discharges to Municipal Sewer System</u>

During the effective period of this permit, the Permittee is authorized to discharge treated wastewater to the city of Chehalis's sewer system subject to the following limits. In addition, the Permittee must comply with the City's conditions of the prohibited discharge, which is contained in the City's Municipal Code, Section 13.08.310.C.



Table 3- EFFLUENT LIMITS (Local Limits): OUTFALL # Outfall 001				
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>		
Flow, MGD	0.45	0.55		
Biochemical Oxygen Demand, mg/L	<45.0	Not Applicable		
Total Suspended Solids, TSS, mg/L	<45.0	Not Applicable		
pH, S.U.	6.	0 – 9.0		
Ammonia Nitrogen, mg/L	<10.0	Not Applicable		
Total Residual Chlorine, mg/L	<1.0	Not Applicable		
Total Fats, Oils, and Grease, mg/L	<100.0	Not Applicable		
Temperature, °C	<40.0	Not Applicable		
Arsenic, mg/L	<0.23	Not Applicable		
Cadmium, mg/L	<0.15	Not Applicable		
Chromium, mg/L	<2.0	Not Applicable		
Copper, mg/L	<0.25	Not Applicable		
Cyanide, mg/L	<1.40	Not Applicable		
Lead, mg/L	<0.14	Not Applicable		
Mercury, mg/L	<0.0003	Not Applicable		
Nickel, mg/L	<1.80	Not Applicable		
Selenium, mg/L	<0.20	Not Applicable		
Silver, mg/L	<0.16	Not Applicable		
Zinc, mg/L	<1.40	Not Applicable		

<sup>&</sup>lt;sup>a</sup> Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

#### **S2.** MONITORING REQUIREMENTS

#### A. Monitoring Schedule

The Permittee must monitor in accordance with the following schedule and must use the laboratory method, detection level (DL), and quantitation level (QL) specified in Appendix A of this permit.

b Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.



**Table 4 – Monitoring Schedule** 

Wastewater Effluent <sup>e</sup>				
Parameter	Units	Minimum Sampling Frequency	Sample Type	
Flow	MGD	Continuous <sup>a</sup>	Meter	
$BOD_5^{\mathrm{d}}$	mg/L	Monthly	24-hour composite <sup>b</sup>	
TSS	mg/L	Monthly	24-hour composite <sup>b</sup>	
Ammonia	mg/L	Monthly	24-hour composite <sup>b</sup>	
Total Residual Chlorine	mg/L	Monthly	Grab <sup>c</sup>	
Total Fats, Oils, and Grease	mg/L	Monthly	Grab <sup>c</sup>	
Arsenic	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Cadmium	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Chromium	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Copper	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Cyanide	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Lead	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Mercury	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Nickel	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Selenium	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Silver	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Zinc	mg/L	Quarterly <sup>f</sup>	Grab <sup>c</sup>	
Fecal Coliform	Organisms /100 ml	Monthly	Grab <sup>c</sup>	
рН	Standard Units	Monthly	Grab <sup>c</sup>	
Receiving Water Ter	nperature Monitoring	Upstream and downstrea	m of the outfall g,h	
Temperature	°C	Continuous a	Meter	

<sup>&</sup>lt;sup>a</sup> Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. The Permittee must sample daily when continuous monitoring is not possible.

<sup>&</sup>lt;sup>b</sup> 24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.

<sup>&</sup>lt;sup>c</sup> Grab means an individual sample collected over a 15 minute, or less, period.

<sup>&</sup>lt;sup>d</sup> The Permittee may collect effluent samples for BOD5 analysis before or after the disinfection process. If taken after, dechlorinate and reseed the sample.

<sup>&</sup>lt;sup>e</sup> Final Effluent means wastewater, which is exiting, or has exited, the last treatment process or operation. Typically, this is after or at the exit from the chlorine contact chamber or other disinfection process.



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Wastewater Effluent <sup>e</sup>				
Parameter	Units	Minimum Sampling Frequency	Sample Type	

<sup>f</sup>Quarterly testing requirement is applicable when discharging to the City of Chehalis's wastewater treatment plant.

#### B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 Code of Federal Regulations (CFR) Part 136.

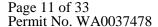
#### C. Flow Measurement, Field Measurement and Continuous Monitoring Devices

#### The Permittee must:

- 1. Select and use appropriate flow measurement devices and methods consistent with accepted scientific practices.
- 2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
- 3. If the Permittee uses micro-recording temperature devices known as thermistors it must calibrate the devices using protocols from Ecology's Quality Assurance Project Plan Development Tool (*Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends*). This document is available online at
  - $http://www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/Mod6\%\\ 20Ecology\%\\ 20SOPs/Protocols/ContinuousTemperatureSampling.pdf$ . Calibration as specified in this document is not required if the Permittee uses recording devices which are certified by the manufacturer.
- 4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
- 5. Calibrate these devices at the frequency recommended by the manufacturer.

<sup>&</sup>lt;sup>g</sup> The Permittee must measure the background temperature at the stairway on the riverbank approximately 250 feet upstream of the Darigold's outfall. The Permittee must measure compliance with the receiving water temperature limit at a point 300 feet plus the depth of water over the discharge port downstream of the Darigold's outfall.

<sup>&</sup>lt;sup>h</sup>Monitoring is dependent on Darigold's ability safely collect samples. If monitoring is not feasible for safety reasons, Darigold must submit an explanation to Ecology.





- 6. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
- 7. Maintain calibration records for at least three years.

#### D. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 Washington Administrative Code (WAC), *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement.

#### S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee must monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

#### A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must:

- 1. Submit monitoring results monthly and quarterly.
- 2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.
- 3. Submit DMR forms monthly whether or not the facility was discharging. If the facility did not discharge during a given monitoring period, submit the form as required with the words "NO DISCHARGE" entered in place of the monitoring results.
- 4. Ensure that DMR forms are postmarked or received by Ecology no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit.
- 5. Submit priority pollutant analysis data no later than 45 days following the monitoring.
- 6. Send report(s) to Ecology at:

Water Quality Permit Coordinator Department of Ecology Southwest Regional Office P.O. Box 47775 Olympia, WA 98504-7775

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All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL) or laboratory quantitation limit (QL or ML), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

#### B. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

- 1. The date, exact place, method, and time of sampling or measurement.
- 2. The individual who performed the sampling or measurement.
- 3. The dates the analyses were performed.
- 4. The individual who performed the analyses.
- 5. The analytical techniques or methods used.
- 6. The results of all analyses.

#### C. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Condition S2. of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR.

#### D. Reporting Permit Violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

- a. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
- b. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within 30 days of sampling.

#### 1. Immediate Reporting

The Permittee must report any failure of the disinfection system <u>immediately</u> to the Department of Ecology's Regional Office 24-hour number listed below:

Southwest Regional Office 360-407-6300



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The Permittee must report any failure of the disinfection system, any collection system overflows, or any plant bypass discharging to a waterbody used as a source of drinking water <u>immediately</u> to the Department of Ecology and the Department of Health, Drinking Water Program at the numbers listed below:

Southwest Regional Office 360-407-6300

Department of Health, Drinking Water 360-521-0323 (business hours)
Program 360-481-4901 (after business hours)

#### 2. Twenty-four-hour Reporting

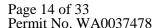
The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone numbers listed above, within 24-hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above.
- b. Any unanticipated **bypass** that exceeds any effluent limitation in the permit (See Part S4.B., "Bypass Procedures").
- c. Any **upset** that exceeds any effluent limitation in the permit (See G.15, "Upset").
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A of this permit.
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

#### 3. Report within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.





- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

#### 4. <u>Waiver of Written Reports</u>

Ecology may waive the written report required in subpart 3, above, on a case by case basis upon request if a timely oral report has been received.

#### 5. All Other Permit Violation Reporting

The Permittee must report all permit violations, which do not require immediate or within 24-hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in paragraph E.3, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

#### 6. Report Submittal

The Permittee must submit reports to the address listed in S3.

#### E. Other Reporting

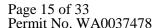
The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (RCW) 90.56.280 and chapter 173-303-145. You can obtain further instructions at the following website: <a href="http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm">http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm</a>.

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, it must submit such facts or information promptly.

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

#### **S4.** OPERATION AND MAINTENANCE

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.





The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out in a manner approved by Ecology.

#### A. Operations and Maintenance Manual

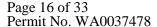
#### The Permittee must:

- 1. Prepare an "or" Update the Operations and Maintenance (O&M) Manual in accordance with 173-240-150 WAC and submit it to Ecology for approval by **January 1, 2014.**
- 2. Review the O&M Manual at least annually and confirm this review by letter to Ecology.
- 3. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
- 4. Keep the approved O&M Manual at the permitted facility.
- 5. Follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M manual must include:

- 1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
- 2. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
- 3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
- 4. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
- 5. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit
- 6. Treatment plant process control monitoring schedule.
- 7. Specify other items on case-by-case basis such as O&M for any pump stations, lagoon liners, etc.

The Permittee must submit an updated Treatment System Operating Plan to Ecology with the application for renewal. This plan must be updated and submitted, as necessary, to include requirements for any major modifications of the treatment system.





#### B. Bypass Procedures

This permit prohibits a bypass which is the intentional diversion of waste streams from any portion of a treatment facility. Ecology may take enforcement action against a Permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten days before the date of the bypass.

2. Bypass which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

No feasible alternatives to the bypass exist, such as:

- The use of auxiliary treatment facilities.
- Retention of untreated wastes.
- Stopping production.
- Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
- Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.

Ecology is properly notified of the bypass as required in condition S3.E of this permit.

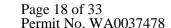
- 3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
  - a. The Permittee must notify Ecology at least 30 days before the planned date of bypass. The notice must contain:
    - A description of the bypass and its cause.



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- An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
- A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
- The minimum and maximum duration of bypass under each alternative.
- A recommendation as to the preferred alternative for conducting the bypass.
- The projected date of bypass initiation.
- A statement of compliance with SEPA.
- A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
- Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
  - If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the





request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

#### C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

#### S5. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by January 1, 2014

#### S6. SOLID WASTES

#### A. <u>Solid Waste Handling</u>

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

#### B. <u>Leachate</u>

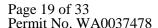
The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

#### C. Solid Waste Control Plan

The Permittee must submit all proposed revisions or modifications to the solid waste control plan to Ecology for review and approval at least 30 days prior to implementation. Once approved, the Permittee must comply with any plan modifications. The Permittee must submit an update of the **solid waste control plan by January 1, 2014.** 

#### S7. NON-ROUTINE AND UNANTICIPATED DISCHARGES

- A. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and **at a minimum** provide the following information:
  - 1. The proposed discharge location.
  - 2. The nature of the activity that will generate the discharge.
  - 3. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.





- 4. The total volume of water it expects to discharge.
- 5. The results of the chemical analysis of the water. The Permittee must analyze the water for all constituents limited for the discharge. The analysis must also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Condition S1. of this permit, water quality standards, and any other limits imposed by Ecology.
- 6. The date of proposed discharge.
- 7. The expected rate of discharge discharged, in gallons per minute. The Permittee must limit the discharge rate so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
- B. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

#### S8. SPILL PLAN

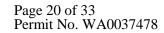
The Permittee must:

Submit to Ecology a Spill Control Plan by January 1, 2014

- Review the plan at least annually and update the Spill Plan as needed.
- Send changes to the plan to Ecology.
- Follow the plan and any supplements throughout the term of the permit.

The spill control plan must include the following:

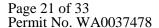
- 1. A list of all oil and petroleum products and other materials used and/or stored on site, which when spilled, or otherwise released into the environment, designate as Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070. Include other materials used and/or stored on site which may become pollutants or cause pollution upon reaching state's waters.
- 2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- 3. A description of the reporting system the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
- 4. A description of operator training to implement the plan.





### **S9. OUTFALL EVALUATION**

The Permittee must inspect, every five years, the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, it must be included in the report. **By January 1, 2014**, the inspection report must be submitted to Ecology.





#### **GENERAL CONDITIONS**

#### G1. SIGNATORY REQUIREMENTS

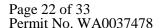
- A. All applications, reports, or information submitted to Ecology must be signed and certified.
  - (a) In the case of corporations, by a responsible corporate officer.

For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (b) In the case of a partnership, by a general partner.
- (c) In the case of sole proprietorship, by the proprietor.
- (d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity

- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to Ecology.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall





operation of the facility, a new authorization satisfying the requirements of <u>paragraph</u> B.2 <u>above</u> must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### **G2.** RIGHT OF INSPECTION AND ENTRY

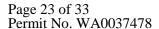
The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy at reasonable times and at reasonable cost any records required to be kept under the terms and conditions of this permit.
- C. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor at reasonable times any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

#### G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.





- 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
- 3. A material change in quantity or type of waste disposal.
- 4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
- 5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].
- 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
- 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
  - 1. A material change in the condition of the waters of the state.
  - 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  - 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  - 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  - 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
  - 6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  - 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
  - 1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
  - 2. Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.



#### G4. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, but no later than 60 days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: (1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); (2) a significant change in the nature or an increase in quantity of pollutants discharged; or (3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

#### G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

#### G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### G7. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

#### A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

#### B. <u>Automatic Transfers</u>

This permit may be automatically transferred to a new Permittee if:

- 1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
- 2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage,



and liability between them.

3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

#### **G8.** REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

#### **G9.** REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

#### G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

#### G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

#### G12. ADDITIONAL MONITORING

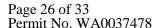
Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

#### G13. PAYMENT OF FEES

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

#### G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs is a separate and additional violation.





Any person who violates the terms and conditions of a waste discharge permit must incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

#### G15. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: (1) an upset occurred and that the Permittee can identify the cause(s) of the upset; (2) the permitted facility was being properly operated at the time of the upset; (3) the Permittee submitted notice of the upset as required in condition S3.E; and (4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

#### G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### **G17. DUTY TO COMPLY**

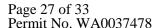
The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### G18. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

#### G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit will, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment





will be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

# G20. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
  - 1. One hundred micrograms per liter (100  $\mu$ g/L).
  - 2. Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - 3. Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
  - 1. Five hundred micrograms per liter (500μg/L).
  - 2. One milligram per liter (1 mg/L) for antimony.
  - 3. Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

#### G21. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

#### APPENDIX A

# EFFLUENT CHARACTERIZATION FOR POLLUTANTS THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of the Department of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L  unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless  specified
	ONVENTIONALS		
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3-		0.3 mg/L
171	GH		
Flow	Calibrated device		0.2 //
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-		
	recording devices		0.2° C
	known as		
	thermistors		
pH	SM4500-H <sup>+</sup> B	N/A	N/A
NON	CONVENTIONAL	LS	
Total Alkalinity	SM2320-B		5 mg/L as
			CaCo3
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM	N/A	N/A
	9221D/E,9222		
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO3-		100
	E/F/H		
Nitrogen, Total Kjeldahl (as N)	4500-NH3-		300
	C/E/FG		

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L  unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified		
Ortho-Phosphate (PO <sub>4</sub> as P)	4500- PE/PF	3	10		
Phosphorus, Total (as P)	4500-PE/PF	3	10		
Oil and Grease (HEM)	1664A	1,400	5,000		
Salinity	SM2520-B		3 PSS		
Settleable Solids	SM2540 -F		100		
Sulfate (as mg/L SO <sub>4</sub> )	SM4110-B		200		
Sulfide (as mg/L S)	4500-S <sup>2</sup> F/D/E/G		200		
Sulfite (as mg/L SO <sub>3</sub> )	SM4500-SO3B		2000		
Total dissolved solids	SM2540 C		20 mg/L		
Total Hardness	2340B		200 as CaCO3		
Aluminum, Total (7429-90-5)	200.8	2.0	10		
Barium Total (7440-39-3)	200.8	0.5	2.0		
Boron Total (7440-42-8)	200.8	2.0	10.0		
Cobalt, Total (7440-48-4)	200.8	0.05	0.25		
Iron, Total (7439-89-6)	200.7	12.5	50		
Magnesium, Total (7439-95-4)	200.7	10	50		
Molybdenum, Total (7439-98-	200.8	0.1	0.5		
7)	200.0	0.1	0.5		
Manganese, Total (7439-96-5)	200.8	0.1	0.5		
Tin, Total (7440-31-5)	200.8	0.3	1.5		
. ,	ANIDE & TOTAL				
Antimony, Total (7440-36-0)	200.8	0.3	1.0		
Arsenic, Total (7440-38-2)	200.8	0.1	0.5		
Beryllium, Total (7440-41-7)	200.8	0.1	0.5		
Cadmium, Total (7440-43-9)	200.8	0.05	0.25		
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2		
Chromium, Total (7440-47-3)	200.8	0.2	1.0		
Copper, Total (7440-50-8)	200.8	0.4	2.0		
Lead, Total (7439-92-1)	200.8	0.1	0.5		
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005		
Nickel, Total (7440-02-0)	200.8	0.1	0.5		
Selenium, Total (7782-49-2)	200.8	1.0	1.0		
Silver, Total (7440-22-4)	200.8	0.04	0.2		
Thallium, Total (7440-28-0)	200.8	0.09	0.36		
Zinc, Total (7440-66-6)	200.8	0.5	2.5		
Cyanide, Total (57-12-5)	335.4	2	10		
Cyanide, Weak Acid	SM4500-CN I	2	10		
Dissociable		_			
Phenols, Total	EPA 420.1		50		
DIOXIN					
2,3,7,8-Tetra-Chlorodibenzo-P- Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L		

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
VOL	ATILE COMPOUN		
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or	1.0	2.0
	SM6230B		
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73- 1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified		
ACID COMPOUNDS					
2-Chlorophenol (95-57-8)	625	1.0	2.0		
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0		
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0		
4,6-dinitro-o-cresol (534-52-1)	625/1625B	1.0	2.0		
(2-methyl-4,6,-dinitrophenol)	020/10202	1.0	2.0		
2,4 dinitrophenol (51-28-5)	625	1.0	2.0		
2-Nitrophenol (88-75-5)	625	0.5	1.0		
4-nitrophenol (100-02-7)	625	0.5	1.0		
Parachlorometa cresol (59-50-	625	1.0	2.0		
7)	025	1.0	2.0		
(4-chloro-3-methylphenol)					
Pentachlorophenol (87-86-5)	625	0.5	1.0		
Phenol (108-95-2)	625	2.0	4.0		
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0		
BASE/NEUTRAL COMPOU		1			
Acenaphthene (83-32-9)	625	0.2	0.4		
Acenaphthylene (208-96-8)	625	0.3	0.6		
Anthracene (120-12-7)	625	0.3	0.6		
Benzidine (92-87-5)	625	12	24		
Benzyl butyl phthalate (85-68-	625	0.3	0.6		
7)	025	0.5	0.0		
Benzo( <i>a</i> )anthracene (56-55-3)	625	0.3	0.6		
Benzo(j)fluoranthene (205-82-	625	0.5	1.0		
3)	020		1.0		
Benzo(r,s,t)pentaphene (189- 55-9)	625	0.5	1.0		
Benzo( <i>a</i> )pyrene (50-32-8)	610/625	0.5	1.0		
3,4-benzofluoranthene	610/625	0.8	1.6		
(Benzo(b)fluoranthene) (205-					
99-2)					
11,12-benzofluoranthene	610/625	0.8	1.6		
(Benzo(k)fluoranthene) (207-					
08-9)					
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0		
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2		
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0		
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6		
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5		
4-Bromophenyl phenyl ether	625	0.2	0.4		
- Dromophenyi phenyi emer	023	0.2	0.4		

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
(101-55-3)		•	
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0
Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine ( <i>as Azobenzene</i> ) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L  unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120- 82-1)	625	0.3	0.6
P	ESTICIDES/PCBs		
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	$0.05^{10}$
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

- 1. <u>Detection level (DL)</u> or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
- 2. <u>Quantitation Level (QL)</u> is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.